

WHAT IS CLAIMED IS:

Sub Obj 1

1. A two-part intervertebral spacer comprising:
a first component having upper and lower vertebral engaging surfaces and
a thickness between the upper and lower surfaces; and
5 a second component engagable within the first component and having a
height greater than the thickness of the first component.

Sub Obj 2

2. The intervertebral spacer as recited in Claim 1, wherein the first
component is a C-shaped ring.

3. The intervertebral spacer as recited in Claim 2, wherein at least a
10 portion of an inner surface of the ring defined by the C-shape is threaded.

4. The intervertebral spacer as recited in Claim 3, wherein the second
component is a cylindrical locking element having threads on an outer surface thereof,
which threads are engagable with the threads on the inner surface of the C-shaped ring.

15 5. The intervertebral spacer as recited in Claim 1, wherein at least one of
the ~~first~~ component and second component is formed from bone.

6. The intervertebral dowel as recited in Claim 5, wherein the first
component is formed from bone and is partially demineralized to leave a mineralized core
of the first component to provide sufficient support to provide subsidence.

7. The intervertebral spacer as recited in Claim 5, wherein at least one of
the upper and lower vertebral engaging surfaces are wholly or partially surface
demineralized to provide a flexible surface to conform to adjacent vertebral endplates.

8. The intervertebral implant as recited in Claim 4, wherein the locking element includes a throughbore for receipt of bone growth inducing factors.

9. The intervertebral implant as recited in Claim 1, wherein the first component is an intact ring having a bore in an outer surface thereof and the second 5 component is a dowel configured to engage an inner surface of the bore.

10. The intervertebral implant as recited in Claim 9, wherein the outer surface of the dowel and the inner surface of the bore are formed with corresponding mating threads.

11. The intervertebral spacer as recited in Claim 9, wherein the intact ring 10 defines a throughbore for receipt of bone growth inducing factors.

Sub a57
12. A two-part intervertebral spacer comprising:
a generally C-shaped ring defining a throughbore and having a predetermined thickness between an upper and a lower vertebral engaging surface;
a threaded dowel having a diameter greater than the predetermined 15 thickness and engagable within the C-shaped ring.

13. The intervertebral spacer as recited in Claim 12, wherein at least one of the C-shaped ring and threaded dowel are formed of bone.

Sub b
14. The intervertebral dowel as recited in Claim 13, wherein the C-shaped ring is formed of bone and at least one of the upper and lower vertebral surface is at least 20 partially surface demineralized.

15. The intervertebral spacer as recited in Claim 12, wherein an inner surface of the C-shaped ring which defines the throughbore is formed with threads.

16. The intervertebral spacer as recited in Claim 12, wherein the threaded dowel defines a throughbore for receipt of bone growth inducing factors.

17. The intervertebral spacer as recited in Claim 12, wherein the threaded dowel includes structure for receipt of insertion instrumentation.

Suba
18. A method of restoring spacing between adjacent vertebrae comprising: providing a two-part intervertebral spacer having a ring defining a bore and upper and lower vertebral engaging surfaces defining a thickness between the upper and lower surfaces and a locking implant engagable within the bore of the ring and having a height greater than the thickness of the ring;

10 positioning the ring within an excised disk space between adjacent vertebrae; and

engaging the locking implant within the ring and with the adjacent

vertebrae
Suba
19. The method according to Claim 18 wherein the step of engaging includes threadedly engaging threads formed on an inner surface of the bore with threads formed on an outer surface of the locking implant.

20. The method according to Claim 18 wherein, prior to the step of engaging, threads are simultaneously formed on an inner surface of the bore and at least one endplate of adjacent vertebrae.

21. The method of Claim 18, wherein the bore defined in the ring is formed after the step of positioning the ring.